

PRISM Media Analysis Platform Release Notes

This document supports firmware version 1.9.

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Release notes

This document describes new features, improvements, and limitations of firmware version 1.9 for the PRISM Media Analysis Platform.

New features and improvements

- Integrated 2.1 speakers on MPX2-10 for listening to audio in SDI and IP streams (requires option SPKR)
- A Lissajous phase plot is integrated into the Audio application on all PRISM platforms (requires option MP-AUD-UP on MPI/MPX and MP2-AUD on MPI2-10/MPX2-10)
- Decode of SMPTE 352M VPID bytes is shown in the Video Session application
- A low-pass filter can be applied in the Waveform application
- SDI Output supports loop-through of ST2110-20, ST2022-6, and SDI streams

General limitations

This firmware release has the following general limitations. Please check the Tektronix Web site (www.tek.com/downloads) for any firmware updates to the PRISM monitor.

ST2022-6 streams

■ All ST2022-6 streams are required to have RTP Payload Type of 98.

ST2110 streams

- The sequence error detection includes the extended sequence number available in ST2110 streams. The error counter is based on the combined sequence numbers.
- ST2110 streams with SD format will not be decoded unless SDI Out loop-through is disabled. To disable loop-through, go to **Settings > Output** and select **Generator** as the SDI Output.

ST2022-7 seamless switching

Seamless switching will not work when selecting an ST2110 input with Path 1 missing.

Power-on error message

When your PRISM is powering on, a error message may be displayed. The following error message is harmless and will not affect the operation of the instrument.

Ignoring BGRT: failed to map image header memory

IP Generator application

- When configuring the IP Generator for Seamless Switching with the ip_gen_config API, setting both paths is required using the scope operators IP1 and IP2.
- SD 525 signal generation in ST2110-20 has a skewed color bar alignment when motion is enabled. It is recommended to only use this signal for IP layer testing.

Trace applications

If Convert to Rec. 709 mode is enabled and the gamut exceeds the 709 gamut, traces may have distortions in the Waveform, Vector, and Diamond applications.

Audio application

- When Dolby audio is included in SDI signals or ST2022-6 streams, the bar display in the Audio application may indicate CRC errors.
- When Dolby audio is included in SDI signals or ST2022-6 streams, undecoded Dolby data is sent out of the headphone port.
- Selection of an audio channel pair (after pressing the Volume button in the Status Bar) is not saved as a preset.
- Video must be present to monitor audio in ST2110 streams.

IP Graphs application

- When the instrument is powered on with no IP input stream connected, the graphs in the IP Graphs application may show a false-event spike.
- The TS-DF graph gets invalid data when PTP is locking.
- The PIT graph may see a large value when changing inputs.

PTP Graphs application

- The PTP Graphs application shows incorrect data when no PTP Master is present.
- When the instrument does not lock to PTP, the measurements using PTP timing information can be corrupted. Set the PTP domain to a number that is not in use to avoid this issue.

PTP When no PTP Master is present, the PTP message rates will be erroneously reported as infinite (INF).

Control IP Port address assignment in DHCP mode

When you have the instrument configured so that the Control IP Port address is assigned using DHCP and a DHCP failure occurs, the Control IP Port address display in the Settings > Network submenu does not indicate that a DHCP failure has occurred. If you notice this issue, you may have to manually configure the Control IP Port address.

SDI Out

- If the PIT jitter is greater than 125 μs, decoded content such as picture and waveform and the SDI Out signal may become unstable.
- When the input signal is switched externally, the SDI output may take time to lock to the new signal.
- ST2110 video is required on SFP+ Port 1 for loop-through on the SDI Out connector to work.
- The SDI Out connector will not output a valid signal when the following ST2022-6 input signal formats are present:
 - = 1080P 23.98, 24, 29.97
 - = 1080sF 23.98, 25, 30
- Loop-through of ST2110 SD input signals on the SDI Out connector is not supported.
- Loop-through of 6G input signals on the SDI Out connector is not supported.

SDI In

■ The instrument will not lock to a 12G-SDI signal without sync byte insertion. Sync byte insertion is required in the SMPTE ST 2082 standard.

SFP+ ports

- SDI SFP+ loop-throughs are not supported for SD formats.
- Optical SFP+ modules, Active Direct Attach Cables (DACs), and Active Optical Cables (AOCs) are supported on the 10 GbE SPF+ ports. Passive DACs are not supported.

Picture application

False color is only supported for HD and UHD formats.

External displays

The MPI2 can drive a maximum of 1 external display. The MPX2 can drive a maximum of 2 external displays.

SDI Generator application

- The SDI generator will generate 3G Level A and 12G test patterns, but there is an inter-channel timing issue for these formats.
- The color bar signal from generator application has an inter-channel timing issue, it should be used only for confidence monitoring.

Version downgrading

Please note the following items before downgrading your software:

- It is strongly recommended not to downgrade to a version earlier than 1.7.1.
- If you are downgrading to a software version earlier than 1.6, you will need to recreate or resave your presets after you downgrade.
- If you are downgrading to a software version earlier than 1.6, Event Log and graph data will be deleted.